

Claims

1. A composition having an activity of inhibiting the onset of alcoholic hepatopathy and an activity of healing it, the composition comprising an unadsorbed fraction which is formed by subjecting a barley *shochu* stillage byproduct produced in the production of *shochu* from a barley as a raw material to solid-liquid separation to obtain a liquid fraction and subjecting the liquid fraction to a separation treatment by adsorption using a synthetic adsorbent, in which the unadsorbed fraction contains plural peptides having an average chain length of from 3.0 to 5.0, and these peptides comprise from 24 to 38% of glutamic acid, from 4 to 20% of glycine, from 5 to 10% of aspartic acid, from 4 to 9% of proline and from 4 to 8% of serine in terms of an amino acid composition ratio when the total content of amino acids derived from the peptides is defined as 100%.

2. The composition according to claim 1, wherein the total content of amino acids derived from the peptides is from 8 to 14% by weight.

3. The composition according to claim 1, wherein the unadsorbed fraction further contains free amino acids, free saccharides, polysaccharides and organic acids.

4. The composition according to claim 3, wherein the unadsorbed fraction contains from 4 to 12% by weight of the free amino acids, from 5 to 10% by weight of the free saccharides,

from 15 to 25% by weight of the polysaccharides and from 2 to 8% by weight of the organic acids.

5. The composition according to claim 1, wherein the unadsorbed fraction is in the form of a freeze-dried powder.

6. The composition according to claim 1, which is used as a drug.

7. The composition according to claim 1, wherein the synthetic adsorbent is an aromatic synthetic adsorbent or a methacrylic synthetic adsorbent.

8. A process for producing a composition having an activity of inhibiting the onset of alcoholic hepatopathy and an activity of healing it and comprising an unadsorbed fraction, which comprises a step of subjecting a barley *shochu* stillage byproduced in the production of *shochu* from a barley as a raw material to solid-liquid separation to obtain a liquid fraction and a step of subjecting the liquid fraction to a separation treatment by adsorption using a synthetic adsorbent to obtain the unadsorbed fraction, in which the unadsorbed fraction contains plural peptides having an average chain length of from 3.0 to 5.0, and these peptides comprise from 24 to 38% of glutamic acid, from 4 to 20% of glycine, from 5 to 10% of aspartic acid, from 4 to 9% of proline and from 4 to 8% of serine in terms of an amino acid composition ratio when the total content of amino acids derived from the peptides is defined as 100%.

9. The process according to claim 8, which further

comprises a step of freeze-drying the unadsorbed fraction.

10. The process according to claim 8, wherein the synthetic adsorbent is an aromatic synthetic adsorbent or a methacrylic synthetic adsorbent.

11. A process for producing a barley *shochu* and a composition comprising an unadsorbed fraction, characterized by comprising a step (A) of fermenting a barley koji produced from a husked barley or a polished barley as a raw material and a *shochu* yeast to form a mature mash and distilling the mature mash to produce the barley *shochu*, and a step (B) of subjecting a barley *shochu* stillage byproduct produced in the production of the barley *shochu* in the step (A) to solid-liquid separation to obtain a liquid fraction and subjecting the liquid fraction to a separation treatment by adsorption using a synthetic adsorbent to obtain the unadsorbed fraction, in which the unadsorbed fraction contains plural peptides having an average chain length of from 3.0 to 5.0, these peptides comprise from 24 to 38% of glutamic acid, from 4 to 20% of glycine, from 5 to 10% of aspartic acid, from 4 to 9% of proline and from 4 to 8% of serine in terms of an amino acid composition ratio when the total content of amino acids derived from the peptides is defined as 100%, an activity of inhibiting the onset of alcoholic hepatopathy and an activity of healing it are provided, and the steps (A) and (B) are conducted continuously.

12. The process according to claim 11, characterized in

that in the step (A), a husked barley or a polished barley prepared separately is fermented along with the barley koji and the *shochu* yeast in obtaining the mature mash.

13. The process according to claim 11 or 12, wherein the synthetic adsorbent is an aromatic synthetic adsorbent or a methacrylic synthetic adsorbent.

14. A food composition having an activity of inhibiting the onset of alcoholic hepatopathy and an activity of healing it as well as an excellent palatability, the composition comprising an unadsorbed fraction which is formed by subjecting a barley *shochu* stillage byproduced in the production of *shochu* from a barley as a raw material to solid-liquid separation to obtain a liquid fraction and subjecting the liquid fraction to a separation treatment by adsorption using a synthetic adsorbent, in which the unadsorbed fraction contains plural peptides having an average chain length of from 3.0 to 5.0, and these peptides comprise from 24 to 38% of glutamic acid, from 4 to 20% of glycine, from 5 to 10% of aspartic acid, from 4 to 9% of proline and from 4 to 8% of serine in terms of an amino acid composition ratio when the total content of amino acids derived from the peptides is defined as 100%.

15. The food composition according to claim 14, wherein the total content of amino acids derived from the peptides is from 8 to 14% by weight.

16. The food composition according to claim 14, wherein

the unadsorbed fraction further contains free amino acids, free saccharides, polysaccharides and organic acids.

17. The food composition according to claim 16, wherein the unadsorbed fraction contains from 4 to 12% by weight of the free amino acids, from 5 to 10% by weight of the free saccharides, from 15 to 25% by weight of the polysaccharides and from 2 to 8% by weight of the organic acids.

18. The food composition according to claim 14, wherein the unadsorbed fraction is in the form of a freeze-dried powder.

19. The food composition according to claim 14, which is used as a seasoning.

20. The food composition according to claim 14, wherein the synthetic adsorbent is an aromatic synthetic adsorbent or a methacrylic synthetic adsorbent.

21. A process for producing a food composition comprising an unadsorbed fraction, which comprises a step of subjecting a barley *shochu* stillage byproduced in the production of *shochu* from a barley as a raw material to solid-liquid separation to obtain a liquid fraction and a step of subjecting the liquid fraction to a separation treatment by adsorption using a synthetic adsorbent to obtain the unadsorbed fraction, in which the unadsorbed fraction contains plural peptides having an average chain length of from 3.0 to 5.0, these peptides comprise from 24 to 38% of glutamic acid, from 4 to 20% of glycine, from 5 to 10% of aspartic acid, from 4 to 9% of proline and from

4 to 8% of serine in terms of an amino acid composition ratio when the total content of amino acids derived from the peptides is defined as 100%.

22. The process according to claim 21, which further comprises a step of freeze-drying the unadsorbed fraction.

23. The process according to claim 21, wherein the synthetic adsorbent is an aromatic synthetic adsorbent or a methacrylic synthetic adsorbent.

24. A process for continuously producing a barley *shochu* and food composition comprising an unadsorbed fraction, characterized by comprising a step (A) of fermenting a barley koji produced from a husked barley or a polished barley as a raw material and a *shochu* yeast to form a mature mash and distilling the mature mash to produce the barley *shochu*, and a step (B) of subjecting a barley *shochu* stillage byproduced in the production of the barley *shochu* in the step (A) to solid-liquid separation to obtain a liquid fraction and subjecting the liquid fraction to a separation treatment by adsorption using a synthetic adsorbent to obtain the unadsorbed fraction, in which the unadsorbed fraction contains plural peptides having an average chain length of from 3.0 to 5.0, these peptides comprise from 24 to 38% of glutamic acid, from 4 to 20% of glycine, from 5 to 10% of aspartic acid, from 4 to 9% of proline and from 4 to 8% of serine in terms of an amino acid composition ratio when the total content of amino acids

derived from the peptides is defined as 100%, an activity of inhibiting the onset of alcoholic hepatopathy, an activity of healing it and an excellent palatability are provided, and the steps (A) and (B) are conducted continuously.

25. The process according to claim 24, characterized in that in the step (A), a husked barley or a polished barley prepared separately is fermented along with the barley koji and the *shochu* yeast in obtaining the mature mash.

26. The process according to claim 24 or 25, wherein the synthetic adsorbent is an aromatic synthetic adsorbent or a methacrylic synthetic adsorbent.